Calibration Report: Pressure Transducer

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Summary

Calibration Date: 28 March 2007 Next Calibration Date: 28 March 2008

A collection, analysis and calibration of data from Vaisala Pressure Transducer, S/N:S4620032 and S/N:P1730016 has been completed. The calibration was performed by the calibration library, Vaisala, Inc. This data was collected by Vaisala, Inc. on March 27, 2007.

MODEL: PTB101B
SERIAL NUMBER: S4620032, P1730016

The test data presented in data table format show the transducers deviation and correction in hPa. The calibration uncertainty is given at 95% confidence level.
Note: Units in hPa per user's request.

APPLICATION: Add corrections to measurements per post calibration table.

VAISALA

Certificate report No B01-07130017

CALIBRATION CERTIFICATE

after adjustment

Customer	SCIENCE SYSTEMS & APPLICATION
Instrument	PTB101B Analog barometer
Serial number	P1730016
Manufacturer	Vaisala Oyj, Finland
Calibration date	28th March 2007
Test procedure	doc210609a

This instrument has been calibrated against a Vaisala PTB220 factory working standard which has been calibrated against a Ruska 2465 pressure balance traceable to the National Institute of Standards and Technology (NIST, USA) at Vaisala Measurement Standards Laboratory (MSL). Vaisala MSL has been accredited by the Finnish Accreditation System (FINAS) according to ISO/IEC 17025 standard.

At the time of shipment, the instrument described above met its operating specifications.

Calibration results

Reference pressure hPa	Observed pressure hPa	Correction* hPa	Uncertainty** hPa
620.2	620.2	0.0	± 0.15
700.3	700.3	0.0	± 0.15
800.4	800.2	0.2	± 0.15
850.5	850.3	0.2	± 0.15
900.3	900.0	0.3	± 0.15
950.3	950.0	0.3	± 0.15
1000.4	1000.1	0.3	± 0.15
1060.4	1060.3	0.1	± 0.15

*To obtain the true pressure, add the correction to the barometer reading. Interpolated corrections may be used at intermediate readings of the scale of the barometer.

**The calibration uncertainty given at 95 % confidence level, k = 2

Equipment used in calibration

Type	Serial number	Calibration date	Certificate number
Vaisala PTB220	X3710015	2006-12-05	K008-P01657
Vaisala PTB220	X1260001	2006-12-07	K008-P01656
AT 34970A	US37047279	2006-08-24	1000330376

Ambient conditions / Humidity 29 ± 5 %RH, Temperature 24 ± 1 °C, Pressure 1018 ± 1 hPa

For Vaisala

Francois Johnson

doc210635b

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VAISALA

Certificate report No B01-07130015

CALIBRATION CERTIFICATE

after adjustment

Customer	SCIENCE SYSTEMS & APPLICATION
Instrument	PTB101B Analog barometer
Serial number	S4620032
Manufacturer	Vaisala Oyj, Finland
Calibration date	28th March 2007
Test procedure	doc210609a

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Calibration results

Reference pressure hPa	Observed pressure hPa	Correction* hPa	Uncertainty** hPa
620.2	620.2	0.0	± 0.15
700.3	700.6	-0.3	± 0.15
800.4	800.7	-0.3	± 0.15
850.5	850.7	-0.2	± 0.15
900.3	900.4	-0.1	± 0.15
950.3	950.3	0.0	± 0.15
1000.4	1000.4	0.0	± 0.15
1060.4	1060.5	-0.1	± 0.15

*To obtain the true pressure, add the correction to the barometer reading. Interpolated corrections may be used at intermediate readings of the scale of the barometer.

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